Only small fractions of soluble ß-glucan modulate the mucosal immune system in carp (Cyprinus carpio L.)

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Only small fractions of soluble ß-glucan modulate the mucosal immune system in carp (*Cyprinus carpio* L.)

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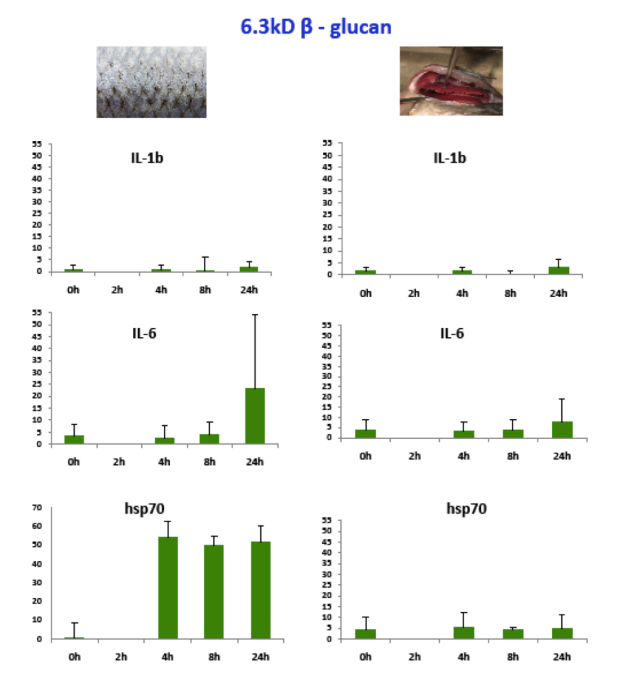
Introduction

β-glucans are well known for their ability to modulate the piscine immune system. The discrepant effects of different origins and solubility of **β-glucans** on immune function possibly relates to factors as **administration route, molecular weight and water solubility.**

Results



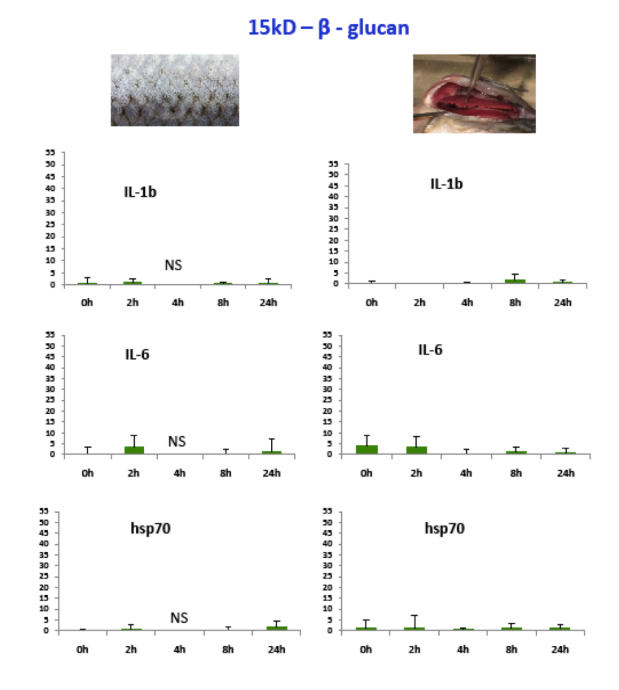


Fig. 1a Water - soluble unbranched 6.3kD β-glucan.

Fig. 1b Water - soluble unbranched 15kD β-glucan.

Expression of interleukin 1β (IL-1β), interleukin 6 (IL-6) and heat shock protein 70 (hsp70) in skin and gill collected from juvenile carps. Fish were immersed with soluble β-glucan (1µg/ml) for 0h, 2h, 4h, 8 and 24h. Results are obtained by RQ-PCR and expressed relative to control at each time point and corrected for 40S expression. NS – no samples.

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